U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Oceanography and Marine Assessment
Ocean Assessments Division
Hazardous Materials Response Branch
7600 Sand Point Way NE, BIN C15700
Seattle, Washington 98115

April 9, 1985

Robert G. Courson, Chief
Superfund Branch
U.S. Environmental Protection Agency
1200 Sixth Ave.
Seattle, Washington 98101

Dear Mr. Courson:

The National Oceanic and Atmospheric Administration (NOAA) has reviewed the Western Processing Feasibility Study released on March 11, 1985. The Feasibility Study was both informative and well-written. The time spent by the site manager and others explaining details of the study was also appreciated. NOAA's immediate concern at this site relates to salmon habitat affected by contamination in Mill Creek. As a designated trustee under CERCLA (Executive Order No. 12316) NOAA may act to recover damages and to restore natural resources on behalf of the public.

The Mill Creek-Springbrook Creek-Black River drainage serves as a transportation, rearing, and spawning area for coho salmon and cutthroat trout. The Washington State Department of Fisheries annually stocks the headwaters of the Springbrook Creek drainage with 71,000 to 194,000 coho salmon and plans to continue to do so.

It is clear from data collected by EPA and others that contamination of Mill Creek waters and sediments has occurred in the past and continues to occur as a result of releases from the Western Processing site and affected environs. Copper, cadmium, and zinc are found dissolved in the surface water and adsorbed on creek sediments.

NOAA's trustee responsibility centers on the effects of this contamination on anadromous fish. EPA states in the Feasibility Study that contamination in Mill Creek is sufficient to cause mortality to salmonids when exposure periods exceed a few days. Since salmon remain in the drainage up to a year before migrating to sea and must migrate past Western Processing, it is likely that contamination has resulted in losses in the fisheries resource.

The contaminants found in Mill Creek sediments persist in the environment for long periods of time, reducing or eliminating the suitability of the stream as anadromous fish habitat. The endangerment assessment states that contaminated sediments would be a continuing source of toxic materials to Mill Creek, with adverse effects on aquatic life. NOAA believes that this contamination will continue to result in

losses of adult anadromous fish from the Pacific Northwest fishery for as long as the contamination persists. Restoration of the stream is necessary to preserve its habitat value.

The Feasibility Study proposes two alternatives for Mill Creek cleanup: 1) no action or 2) sediment removal. It is assumed that either alternative would be used in conjunction with another alternative involving cleanup of the land portion of the site.

The data establish that the major threat to Mill Creek organisms is from dissolved contaminants. The most likely source of these contaminants is groundwater flowing to the creek from areas adjacent to and under Western Processing. Adequate cleanup of Mill Creek contamination cannot be initiated until the source is controlled. Therefore alternative 1, No action, outlined in the Feasibility Study is not acceptable in terms of potential natural resource impacts. Alternatives two through five outlined in the Feasibility Study do address control of the groundwater problem. EPA's selection and implementation of one of these site cleanup alternatives should emphasize the most effective groundwater control program feasible.

Alternative six, Mill Creek No Action, is unacceptable as it relates to NOAA resource trustee responsibilities. While the Feasibility Study states that if nothing were done contaminated sediments would gradually disperse downstream in five to ten years, the reliability of the procedure used to estimate this is questionable. There is insufficient evidence to substantiate assumptions relative to the fate and effects of sediments allowed to remain in Mill Creek. In addition, five to ten years is an unacceptable period to wait for water quality improvement in Mill Creek.

EPA should vigorously pursue alternative seven, Mill Creek Sediment Removal. The adverse environmental effects of a one month stream diversion will be much less than the benefits derived from sediment removal. The removal should be timed to minimize impacts on salmon rearing in the stream. While NOAA recognizes that water quality problems unrelated to Western Processing exist in Mill Creek, the suitability of the creek as anadromous fish habitat will be improved by implementation of alternative seven.

NOAA has three concerns relative to alternative seven which were not completely addressed in the Feasibility Study. First, the vertical and horizontal extent of contamination in the creek sediments is not defined. It assumes that a 2,300-foot long area of creek bed, one foot deep, will be removed. A lack of data, which the study acknowledges, precludes an accurate assessment of the actual extent of contamination. An underestimate of the required sediment removal could result in a substantial increase in the cost of this option.

Second, the extent of sediment removal required will presumably be determined according to a performance standard, although no indication

is given as to what this standard will be. The standard should be specified and the sampling requirements determined to prevent delays that might increase the duration of stream diversion.

Third, sediment removal cannot be effective until the influx of contaminated groundwater is controlled. Alternative seven must be carefully integrated with the onsite cleanup alternative to ensure the most rapid reduction of Mill Creek contamination.

Some of the source control alternatives discussed in the Feasibility Study could take several years to construct. During this time contaminants will continue to flow into Mill Creek. Impacts on anadromous fish will continue to occur during this time. The responsible parties should propose actions to mitigate fish impacts during the construction period.

NOAA will offer whatever appropriate assistance it can provide to ensure an effective and comprehensive implementation of site cleanup actions.

Sincerely,

Robert Pavia
Waste Site Program Manager

cc J. Schwarz, EPA
C. Polityka, USDOI
R. Goodman, WDOE

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